## ABSTRACT

Methods of using Zot or zonulin as an antigen specific inhibitor of APC activity and lymphocyte proliferation, being primarily useful in the field of immunoregulation and immunotherapy as described. Specifically, and zonulin inhibit Zot presenting cell-mediated antigen-specific lymphocyte proliferation in a dose dependent manner. effect is associated with the presence macrophage surface receptor to which Zot binds in a specific and saturable way. This down-regulation of the immune response is, at least in part, associated with a decreased uptake of antigen.